
On the Importance of Broadband Deployment

Prepared for the Federal Communications
Commission by the Optoelectronics Industry
Development Association (OIDA)
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OIDA Membership (Dec 2002)

OIDA's mission is to promote optoelectronics worldwide and advance competitiveness of its members.

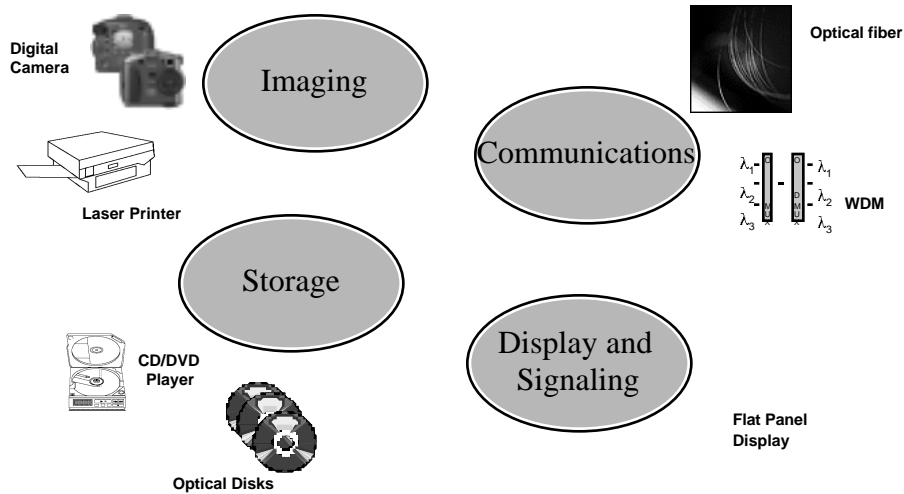
* 3M	EMCORE	Optical Horizons
Agere	Fairchild Imaging	OptiComp
* Agilent	* GELcore	Panasonic Boston Lab
Agility	* GE	Photonics Research Ontario
Applied Optoelectronics	Honeywell	Rohm & Haas
AXT Optoelectronics	Ignis Optics	RSoft
Boeing	Incubic	Sandia
BU Photonics Ctr.	* Infineon	Schott Optovance
Calient Networks	INO, Canada	* Telcordia
Canadian Microelectronics	* Intel	TRA-CON
Celestica	JDS Uniphase	UCLA
* Corning	kSARIA	Uniroyal
* CREE	* Kodak	Univ. of NM, CHTM
CRi	Light Wave Venture	Univ. of NC, COOC
Digital Optics	* LumiLeds	Univ. of Rochester, Optics Institute
Dow Corning	New Focus	Universal Display
* Dupont iTechnologies	NRC, Canada	Verrillon
EM4 Photonics	OpNext	

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Optoelectronics Product Functions



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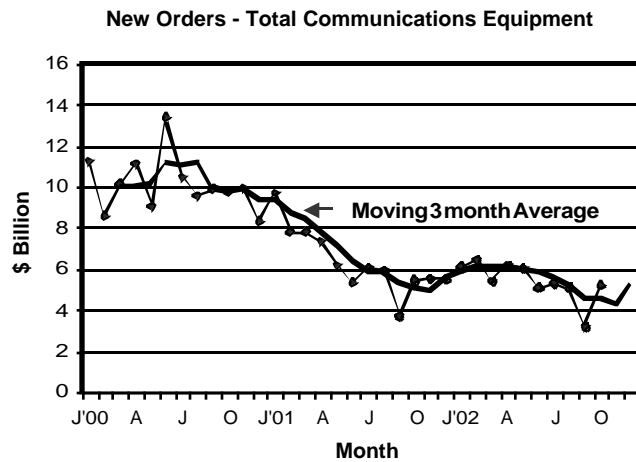
The Communication Value Chain

1. Service/content providers
e.g. Time Warner-AOL, Disney, etc.
1. Carriers
ILECs (Verizon), CLECs (Williams), Long distance (AT&T), Cable TV (Comcast), etc.
2. System/equipment
e.g. Agilent, Cisco, etc.
3. Component/module
e.g. Corning, JDS Uniphase, Triquint, etc.
4. Materials and process equipment
e.g. Applied Materials, KLA-Tencor, etc.

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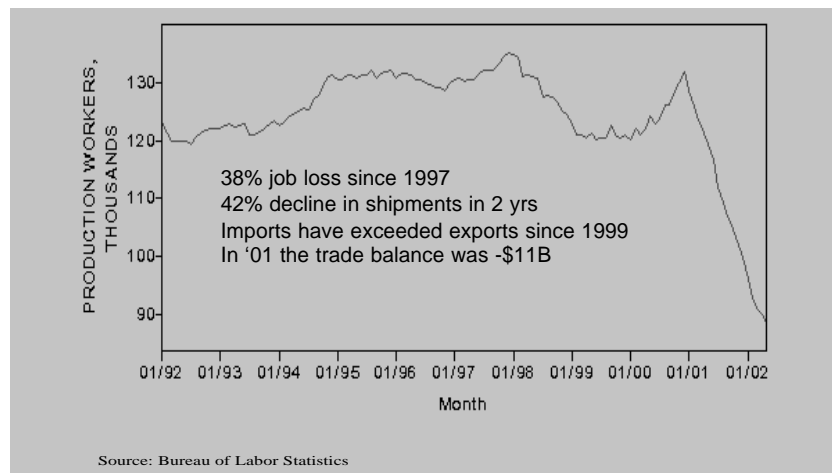
Communications Equipment Orders - U.S.



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Production Workers in Communications



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US Communications Industry

- Carriers have no incentive to deploy
- Telecom equipment revenues are decreasing
- The supply chain is not investing in R&D
- Many jobs are lost in the US
- Manufacturing moves abroad
- Foreign manufacturers penetrate US markets

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“Broadband” in the U. S.

Modest Performance

(>200 kbs, instead of 10-100 mbs)

Sparsely deployed

(The carriers have no incentive to deploy)

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Broadband Outside the US

■ National initiatives - long range goals

- Japan
- Korea
- Sweden
- Singapore

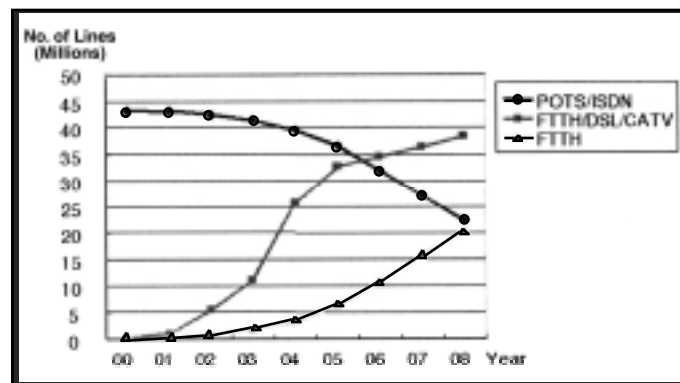
■ Preparations - field trials

- China
- Netherlands

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The Broadband Market Trend in Japan



Source: InfoCom Research, Inc, H. Shinohara, NTT

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Goal for Foreign Broadband Initiatives

Country	Mb	Penetration	Year
Korea	20	70%	2005
Japan	10-100	50%	2008
Sweden	5	98%	2005
USA	10 - 100	?	?

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Recommendations

- Generate regulatory framework for a national initiative
- Declare services provided over true broadband facilities to be an interstate service solely regulated by the FCC
- Do not regulate services provided over true broadband facilities
- Do not apply the unbundling obligations to the true broadband facilities, such as FTTH
- Permit ILECs to retire or sell their existing copper plant where FTTH is deployed

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